

California Desert Renewable Energy Conservation Plan Independent Science Advisors' Workshop

Investor-Owned Utilities (IOUs) Stakeholder Discussion

April 22, 2010



California Renewable Portfolio Standard (RPS)

- **Current RPS requirements: 20% by 2010, with flexible compliance rules that allow Investor-Owned Utilities (IOUs) to comply by 2013**
 - Flexible compliance allows for shortages in early years to be made up by overages in later years
 - Certain provisions allow for delay of RPS requirements (e.g., insufficient transmission)
 - Regulations provide for penalties on IOUs if RPS goals are not met
- **Future RPS requirements: 33% by 2020**
 - Legislative activity in 2009 session and likely again this year to codify this requirement
 - Regulators are requiring that IOUs plan for a 33% RPS in our bi-annual long-term (10-year-out) electricity procurement planning process
 - Air Resources Board (ARB) implementing Governor's executive order to require 33% RPS as part of AB32 legislation to reduce greenhouse gas emissions
 - This increased RPS mandate represents a significant planning and infrastructure development challenge for IOUs
 - SDG&E has voluntarily committed to going to a 33% RPS

Role of Investor-Owned Utilities in Renewables

- **Primary role of utilities is to be a purchaser of renewable energy from developers on behalf of our customers and to build transmission lines**
 - Investor-owned utilities (IOUs) represent approximately 75% of the electricity supplied in CA
 - IOUs will be off-takers for significant portion of CA renewable energy
 - Vast majority of renewable energy in CA being developed by independent power producers, although some will be developed by IOUs
 - Cost to buy renewables from independent developers is passed through directly to customers -- IOUs do not add any margins
 - IOUs will develop significant portion of transmission to access renewable energy projects
- **All three IOUs have built RPS portfolios of over 20% renewables in future years**
 - Many projects under contract but not yet operational, so actual deliveries remain less than 20%
 - Not all projects currently under contract will succeed
 - Additional projects will continue to receive contracts from IOUs in coming years, building toward a 33% goal and replacing failed projects

Preserve & Conservation Area Design

- **Accommodation of linear rights-of-way within these preserves where compatible**
 - Large patches of contiguous habitat identified early to benefit long-term benefits to sensitive biological resources
 - Some corridors preserve habitat for sensitive wildlife and plant species
- **Conservation areas should overlap and be consistent with existing specially designated habitat and HCP areas**
 - DWMAs, ACECs, CVMSHCP



Preserve & Conservation Area Design

- **Consideration of new or existing facilities as well as O&M requirements of those facilities**
 - Annual patrol of lines, repairs, vegetation management, need to comply with existing and changing regulations
- **Compensatory Mitigation requirements**
 - Differences between new project construction impacts vs. the broad category of O&M, including temporary vs. permanent impacts



Renewable Energy Zones

- **Overall design should include plan for new transmission and telecommunication, distribution lines, and substations**
 - Consider new projects as well as future O&M requirements
- **Wildlife movement and avoidance of desert wash areas have been identified as important criteria in the design of these REZs**
 - T/L corridors can actually accommodate these movement corridors and in many cases can span washes
- **Linear facilities such as transmission lines are different from generation facilities**
 - Maybe "temporary" impacts are possible and long-term restoration is a possibility
- **Consider existing corridors and facilities versus new in establishment of these REZs**



Linear Facilities are Different

- **Need for practical solutions to balance public safety and necessity and wildlife protection**
- **Nature of linear facilities**
 - Level of flexibility during construction to avoid impacts to species and habitats to the greatest extent possible
 - Various habitats crossed without impeding wildlife movement
- **Consideration of modified survey protocols for linear projects**
 - Much biological data already collected for O&M and project activities
- **Collaboration to address issues to balance safe operation of facilities with species protection**
 - Need research, ingenuity and technological solutions
 - Raven nest management
 - Predator perching
- **Conflicting rules and regulations**
 - Need for win-win for public safety and wildlife protection

